Submission:

SA Labor Leader's Road Safety Summit

April 2020

RAA

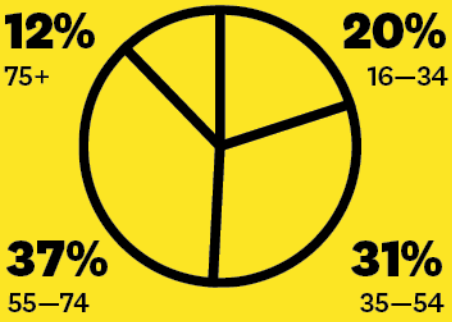
RAA at a glance

South Australia's
largest
membership organisation

Advocating for South Australians for over
115 years

750k+
current members
(55% of SA adults)

52%
Just over half our members are women



Our members span all adult age groups

1000+
staff employed across SA

Largest
personal lines insurer in SA

350k
roadside rescues per year

450+
tourism providers promoted on Experience SA

500+
businesses accredited through RAA's Approved Repairer network

27k
SA school students educated on road safety each year

23k+
free lessons delivered to keep SA learner drivers safe

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Background

RAA is South Australia's largest member organisation, representing more than 750,000 South Australians (around half the state). Through our diverse range of motor, home and travel products and services, we interact with our members in a range of ways that provide unique insight into the services and public policy settings South Australians want and need.

RAA has had a trusted advocacy role in transport and mobility for more than 115 years. This means we have an expert understanding of South Australia's transport requirements. We ensure our advocacy is evidence-based by consulting with industry, government and our members and by utilising data and our own research to develop and test our recommendations.

RAA aligns its mobility advocacy with the following three themes:

- **Safe** – A safe mobility system can be defined as a system that not only achieves, but outperforms, national and international safety benchmarks. It encompasses safe people, using safe vehicles, on safe roads, at safe speeds.
- **Accessible** – To have a cost efficient, convenient and reliable transport network as an essential part of personal mobility.
- **Sustainable** - Sustainable mobility encompasses the needs of current and future generations, and considers financial, societal and environmental factors.

RAA welcomes the opportunity to provide a submission to this consultation process.

Key principles for road safety interventions

RAA advocates for the following principles to underpin road safety interventions:

1. **Safe System approach** – Interventions should continue to be framed within a strategy underpinned by a Safe System approach, which recognises that road crashes are often the result of human mistakes and poor choices, acknowledges that the human body is fragile, and seeks collectively to create a system where human error does not result in a fatality or serious injury. Interventions should address the safety of roads, speeds, vehicles and people.

2. **Embracing both evidence and innovation** – Interventions should be selected based on where the evidence says risk is highest and what has been demonstrated to reduce risk (either in Australia or in comparable international settings). Where new interventions are introduced, these should be evaluated to measure their impact, acknowledging that this often takes years. Promising innovative ideas that have not been previously tested should not be automatically rejected due to lack of existing evidence for their effectiveness, but rather they should be piloted and evaluated. This is the only way that South Australia can show national, and international, leadership on road safety.

3. **Focused on road danger reduction** – Interventions should seek to lower road fatality and injury figures by reducing road danger rather than reducing the accessibility or sustainability of mobility. Measures that make it more difficult for the whole population or for certain population groups (e.g. children, young adults, older people or people on low incomes) to travel should be avoided unless they address a risk inherent to this population group. Likewise, interventions should not seek to reduce vulnerable road user fatalities and injuries by deterring travel by these modes, particularly for sustainable modes such as walking and cycling.

The state of play of road safety in 2020

2020 marks the final year of Australia's *National Road Safety Strategy 2011-2020* and of South Australia's complementary *Towards Zero Together* 2020 Road Safety Strategy. Both strategies set targets to reduce the annual numbers of road crash fatalities and serious road crash injuries by at least 30 per cent by the end of 2020 (compared with the 2008-2010 average). In the case of South Australia, this amounted to a target of fewer than 80 fatalities and 800 serious injuries by 2020.

Neither Australia nor South Australia is on track to achieve its targets. In 2019, there were 1,188 road deaths in Australia,[1] only a 17% decrease from the 2008-2010 baseline figure of 1,426. Road death reduction has stagnated since 2013, when there were 1,187 road deaths. There is still no nationally consistent measure of road injuries to track progress against, although hospital figures indicate an increase over time in the number of road users being hospitalised.[2]

South Australia recorded 80 road deaths in 2018 and looked on track to meet its road fatality target. However, 2019 saw a horrific increase in fatalities up to 114, which exceeded even the 2008-2010 baseline figure of 112.[3] This has been succeeded by 32 road deaths in the first quarter of 2020, even more than the figure recorded in the first quarter of 2019.[4]

On a more positive note, South Australia is on target to meet its goal of fewer than 800 serious injuries per year by 2020, having achieved this target every year since 2012, and with just over 100 serious injuries in the first quarter of 2020.[5] Of note, the Department of Planning, Transport and Infrastructure (DPTI) stated that in 2012 the process for SAPOL collecting injury data was changed, and hence 2008-2010 figures may not be directly comparable with 2019 figures.[6] The number of serious injuries recorded in 2019 was actually higher than the figure in 2012,[7] suggesting that progress here too has now stalled.

It is possible that travel restrictions implemented as a result of COVID-19 will enable both Australia and South Australia to technically meet their 2020 targets, since there is a correlation between traffic volumes and road deaths and injuries. Such an achievement would not give a true picture of road safety progress given it would be a result of reduced mobility rather than reduced road danger.

Per 100,000 population, in 2019 South Australia had the highest rate of deaths of any state or territory except Northern Territory – at 6.51 compared with an Australian average of 4.68. Even South Australia's much lower 2018 figure of 80 deaths placed it above the Australian average for deaths per 100,000 population.[8] Australia's fatality rate per 100,000 population, per 10,000 registered vehicles and per 100 million vehicle kilometres travelled is itself only average among

[1] Bureau of Infrastructure, Transport and Regional Economics (2020), *Road Deaths Australia December 2019*, accessed at https://www.bitre.gov.au/publications/ongoing/rda/index

[2] Bureau of Infrastructure, Transport and Regional Economics (2019), *Road trauma Australia 2018 statistical summary*, accessed at https://www.bitre.gov.au/publications/ongoing/road_deaths_australia_annual_summaries

[3] Department of Planning, Transport and Infrastructure (2020), *2019 Road Fatalities and Serious Injuries In South Australia*, accessed at https://www.dpti.sa.gov.au/towardszerotogether/road_crash_facts

[4] Accessed at https://www.dpti.sa.gov.au/towardszerotogether/road_crash_facts/sa_crashes#reports

[5] Accessed on 1 April 2020 at https://www.police.sa.gov.au/about-us/traffic-statistics

[6] Department of Planning, Transport and Infrastructure (2019), *South Australia's Road Safety Strategy Annual Progress Report 2018*, accessed at https://www.dpti.sa.gov.au/towardszerotogether/road_crash_facts

[7] Accessed at https://www.dpti.sa.gov.au/towardszerotogether/road_crash_facts

[8] Bureau of Infrastructure, Transport and Regional Economics (2020), *Road Deaths Australia December 2019*, accessed at https://www.bitre.gov.au/publications/ongoing/rda/index

OECD countries, behind many northern European countries (notably the UK, Switzerland and Scandinavia), and over twice the rate of Norway, the safest country in the OECD.[9]

It is clear that a lot more progress needs to be made to make South Australia's roads safer. The personal and economic costs of road trauma continue to be monumental. The economic costs of road trauma in Australia (including loss of life and health, vehicle damage, disability care, health services and travel delay) were estimated at $22 billion in 2015 and the costs to government budgets (including lost taxation, income support and health services) at nearly $4 billion per year.[10]

[9] Bureau of Infrastructure, Transport and Regional Economics (2019), *International road safety comparisons 2017* accessed at https://www.bitre.gov.au/publications/ongoing/international_road_safety_comparisons

[10] Australian Automobile Association (2017), *Cost of road trauma in Australia 2015*, accessed at https://www.aaa.asn.au/wp-content/uploads/2018/03/AAA-ECON_Cost-of-road-trauma-full-report_Sep-2017.pdf

A. Safe Roads

Safe roads are integral to a Safe System approach: roads need to be designed, built, maintained and upgraded so as to minimise the risk of a crash and to ensure that crashes that do occur are unlikely to result in death or serious injury. The term 'roads' should be understood in the broadest sense to cover the full range of road transport infrastructure, including the road itself (in both urban and rural areas), road shoulders and medians, adjacent footpaths and bicycle paths, intersections, crossings and road signs.

The Australian Road Assessment Program (AusRAP) forms part of the International Road Assessment Program (iRAP), which assesses roads to provide a simple and objective measure of the level of safety built into the road for vehicle occupants, motorcyclists, cyclists and pedestrians. Roads are rated on a five-star scale, where 5-star roads are the safest and 1-star roads are the least safe. Research has shown that a person's risk of death or serious injury is approximately halved for each incremental improvement in a road's star rating and that in high income countries there are $4 of economic benefits for every $1 invested in safer roads.[11] A sample of AusRAP/ANRAM assessments in Australia shows that, as of 2018, 7% of travel was on 1-star roads and 28% was on 2-star roads for vehicle occupants, with much worse figures for pedestrians, cyclists and motorcyclists.[12] iRAP characterises 5-star roads as follows:

- For pedestrians – Footpath present, signalised crossing with refuge, street lighting, 40 km/h.
- For cyclists – Off-road dedicated cycle facility, raised platform crossing of major roads, street lighting.
- For motorcyclists – Dedicated, separated motorcycle lane, central hatching, no roadside hazards, straight alignment, 80 km/h traffic.
- For vehicle occupants – Safety barrier separating oncoming vehicles and protecting roadside hazards, straight alignment, 100 km/h traffic.[13]

RAA recommends exploring initiatives in the following areas to make South Australian roads safer:

A1. **Road infrastructure funding being conditional on the inclusion of Safe System treatments** – Part of the business case for new road infrastructure should include measuring and publishing the road star rating prior to investment and the predicted road star rating post-investment (or, in the case of new roads, simply predicting what the road's star rating will be). Once the investment has been made, the road star rating should again be measured and published to evaluate if the predicted road safety benefits have been delivered.

A2. **Continuing to upgrade state highways to have a 3-star safety rating or better, giving priority to eliminating all sections of 1-star road** – The regional road network accounts for most South Australian road fatalities (half of which are single vehicle crashes) and over 8 in 10 of the fatalities in the first quarter of 2020, and so needs particular prioritisation when making safety improvements, as advocated for by Infrastructure Australia.[14] RAA's 2019 Risky Roads campaign received more than 1,300 nominations for South Australian roads or intersections people found confusing, difficult to negotiate or that make them feel unsafe, with regional roads

[11] Accessed at https://www.vaccinesforroads.org/business-case-for-safer-roads/

[12] *Inquiry into the National Road Safety Strategy 2011-2020* (2018), accessed at https://www.roadsafety.gov.au/nrss/inquiry

[13] Accessed at https://www.irap.org/3-star-or-better/

[14] Infrastructure Australia (2020) *Infrastructure Priority List – Project and Initiative Summaries*, accessed at https://www.infrastructureaustralia.gov.au/sites/default/files/2020-03/2020_infrastructure_priority_list_low_resolution_-_updated.pdf

making up 10 of the top 15.[15] The National Road Safety Action Plan 2018-2020 aimed to achieve 3-star ratings or better for 80% of travel on state roads. Each incremental improvement in a road's star rating roughly halves the death or serious injury risk, so the focus should continue on upgrading all of the state's roads to meet the 3-star rating, with an initial emphasis on eliminating 1-star roads and on upgrading the 2-star roads that carry the highest volumes of traffic. New major road projects should be built to at least a 3-star safety rating as standard as it is usually much cheaper to design in safety features from the start than to retrofit them.

A3. **An ongoing commitment to fund road maintenance, and to eliminate the road maintenance backlog** – Infrastructure Australia recently identified a national road maintenance strategy as a high priority initiative to address the road maintenance backlog across local, state and national roads, requiring action from state governments to prioritise and fix roads in poor condition.[16] An ageing road network has serious long-term cost and road safety implications if not addressed, as does a failure to manage vegetation alongside the road network. The safety of vulnerable road users in particular is compromised by poor road surface conditions and localised pavement failures. The Department for Planning Transport and Infrastructure has identified a renewal backlog across the South Australian network at around $723 million. This is corroborated by RAA's assessment of the network and feedback both from our members and the broader community on the condition and usability of the road network – the most common issues we receive feedback on relate to the general condition of the road surface. To address this issue, road maintenance funding should be increased and recorded as a distinct line item in the State Budget to provide transparency. In addition, an arterial road reseal program should be established to ensure key routes are maintained to standard. RAA welcomes the announcement by the State Government in March 2020 to fast track $120 million's worth of road maintenance particularly in regional areas of South Australia. Investment in projects such as these is essential to progressively bring the road network up to, and maintain it at, an acceptable standard.

A4. **Increasing the provision of bikeways on higher speed roads with significant bicycle usage and extending the operating hours of cycle lanes where appropriate** – Cyclist are a vulnerable road user group representing 22 fatalities and 280 serious injuries in South Australia between 2014 and 2018. Forty five per cent of these crashes occurred on roads with a 60 km/h speed limit, 35% occurred on roads with a 50 km/h speed limit and 93% of casualties reported to SAPOL were in metropolitan Adelaide.[17] The vast majority of cyclist deaths are the result of a collision with a motor vehicle. In line with delivering safer roads for cyclists, further dedicated bikeways should be built in Adelaide which physically separate cyclists from motor vehicles. These are particularly needed on higher speed roads (e.g. those with 60 km/h) that have significant current, or potential future, bicycle usage. To maximise usage and safety, new bikeways should not only connect with existing cycling routes but also continue through intersections. Many Adelaide arterial and distributor roads do have cycle lanes, which at least reserve some road space for cyclists. However, cycle lanes do not provide physical protection for cyclists and in a large proportion of cases only operate during peak hours. Analysis should be conducted of cycle lane usage by vehicles for parking outside of the cycle lane operating hours with the goal of extending cycle lane operating hours where utilisation for parking is low.

[15] Accessed at https://our.raa.com.au/about-raa/risky-roads

[16] Infrastructure Australia (2020) *Infrastructure Priority List – Project and Initiative Summaries*, accessed at https://www.infrastructureaustralia.gov.au/sites/default/files/2020-03/2020_infrastructure_priority_list_low_resolution_-_updated.pdf

[17] Department of Planning, Transport and Infrastructure (2019), C*yclists involved in road crashes in South Australia*, accessed at https://www.dpti.sa.gov.au/towardszerotogether/road_crash_facts

B. Safe Speeds

In line with the physical laws of momentum, the speed a vehicle is travelling at has a major impact on crash severity: the more kinetic energy a vehicle has prior to impact and the more rapidly the speed changes, the greater the force a human body is subjected to. Vehicle crumple zones, air bags and seatbelts are all designed to reduce the suddenness with which the vehicle occupants change speed and hence reduce injury risk. Collisions between vehicles travelling at similar speeds in similar directions are likely to lead to less severe injuries than head-on collisions or collisions between a vehicle and a solid, immovable object.

Since kinetic energy relates to mass as well as speed, lighter objects experience a more rapid acceleration or deceleration than heavier objects when the two collide. In the case of a collision between a bus or truck and a passenger vehicle, the occupants of the latter will typically experience a more rapid change in speed and hence be worse off. In the case of a collision between a motor vehicle and a pedestrian or cyclist, the differences in mass are more extreme, the differences in speed may be large and pedestrians and cyclists lack the protection afforded to vehicle occupants, all meaning that speed changes may be particularly sudden for a pedestrian or cyclist, making them a lot more vulnerable.

In addition to higher speeds being associated with greater crash severity, they are also linked with higher crash risk in the first place, since the distance a driver travels before reacting, and the distance required to brake, will both be larger than at lower speeds. Similarly, large differences in speed between road users increase the risk of being involved in a crash. Studies have shown that an increase in vehicle average speed on a road is linked with a higher injury and fatality crash frequency on that road.[18] Conversely, a reduction of 5 km/h in average travel speed has been shown to reduce rural casualty crashes by about 30% and urban casualty crashes by about 25%.[19]

Vehicles need to travel at speeds that are appropriate to the conditions of a road, including the road layout and design, weather conditions, traffic volumes and types of road users. Some roads are designed to enable safe travel at higher speeds in suitable conditions, whereas other roads are not. There are a variety of ways that governments can seek to influence the speeds at which vehicles travel, including through community education, advisory signs, speed limits, speed cameras, promoting vehicle intelligent speed adaptation and the design of the road. Some of these measures need to be complementary as, for example, road users are less likely to comply with a low speed limit on a road that has the 'look and feel' of a higher speed road (at least in the absence of enforcement measures such as speed cameras or education as to the reason for the lower speed limit).

RAA recommends exploring initiatives in the following areas to make South Australian speeds safer:

B1. **Reducing speed limits on roads where this offers clear road safety benefits and where there is broad community support** – Under a Safe System approach, speed limits need to consider the maximum forces a human body can tolerate: For example, most unprotected road users survive if hit by a vehicle at up to 30 km/h, a modern car can protect occupants travelling at up to 50 km/h in a side collision and a safe car can protect occupants travelling at up to 70 km/h in a head-on collision.[20] In Australia, distances between regional towns are very big and

[18] OECD International Transport Forum (2018), *Speed and Crash Risk*, accessed at https://www.itf-oecd.org/sites/default/files/docs/speed-crash-risk.pdf

[19] Department of Planning, Transport and Infrastructure (2019), *South Australia's Road Safety Strategy Annual Progress Report 2018*, accessed at https://www.dpti.sa.gov.au/towardszerotogether/road_crash_facts

[20] Ibid.

many cities are spread over a large geographical area. Speed limits therefore need to be set carefully, since low speed limits could in some cases greatly increase travel times and therefore reduce accessibility. However, high speed limits on roads not appropriate for higher speeds are likely to lead to increased injuries and fatalities. Speed limits rely on broad community support in order to be effective, and it is generally easier to gain this support where there are pedestrians and local residents who will benefit from safer speeds as well as drivers and riders. Lower speed limits should be considered where the road safety benefits outweigh any increase in travel times, where there is broad community support for doing so and where it is not feasible to upgrade the road to deliver the same road safety benefits.

B2. **Further use of average speed safety cameras on high risk sections of regional highways** – Appropriately set speed limits do not in themselves ensure that all road users travel within the speed limit. In a 2018 study of 130 sites around South Australia, 17% of vehicles were exceeding the stated speed limit, and SAPOL issues over 200,000 speed enforcement expiations each year.[21] Furthermore, speeding is a contributory factor in around 3 in 10 fatal crashes in South Australia.[22] Average speed safety cameras are a fairer and more effective method of ensuring speed limit compliance than cameras installed at a single point only: they do not penalise drivers for accidentally exceeding the speed limit for a brief period of time and they enforce compliance over a long continuous stretch of road rather than only at a single point on that road. Average speed safety cameras are currently operating in several locations in South Australia, and further cameras should be considered for sections of regional highway where speed limit compliance is poor and crash rates are high.

B3. **Ways to utilise emerging Intelligent Speed Assist technology** – New vehicles will increasingly include Intelligent Speed Assist (ISA) technology, whereby the GPS location of a vehicle is cross-referenced against a digital road map containing speed limit information and used to determine if a vehicle is exceeding the speed limit. ISA can send a warning to the driver when the speed limit is being exceeded or even prevent a driver from exceeding the speed limit altogether. ISA has the potential to reduce both accidental and deliberate exceeding of the speed limit and hence reduce crashes and injuries. It is important that consideration is given to how this technology can be best utilised, for example: ensuring South Australia has an accurate and real-time digital roadmap; incentivising voluntary use of ISA; and mandating use of ISA where justified, e.g. for drivers who commit multiple speeding offences.

[21] Department of Planning, Transport and Infrastructure (2019), *South Australia's Road Safety Strategy Annual Progress Report 2018*, accessed at https://www.dpti.sa.gov.au/towardszerotogether/road_crash_facts

[22] Department of Planning, Transport and Infrastructure (2020), *2019 Road Fatalities and Serious Injuries In South Australia*, accessed at https://www.dpti.sa.gov.au/towardszerotogether/road_crash_facts

C. Safe Vehicles

Vehicles play an important road safety role, both in relation to the risk of a crash happening and the likely severity of any crash. Vehicles are being designed with an increasing range of safety features, building on long-standing features such as vehicle crumple zones, air bags and seatbelts that focused chiefly on reduced severity to more modern features such as adaptive cruise control, autonomous emergency braking and lane keep assist that seek to prevent crashes occurring in the first place.

The Australasian New Car Assessment Program (ANCAP) conducts crash testing and publishes safety ratings for new vehicles entering the Australian and New Zealand markets using a 0 to 5-star rating system. Vehicles are evaluated against adult occupant protection, child occupant protection, vulnerable road user protection and safety assist, with criteria becoming more stringent each year. The Used Car Safety Ratings (UCSR) similarly score vehicles but based on an analysis of real crash data. These tools enable consumers to compare the relative safety of different vehicles when considering a purchase. The safety standards for vehicles used in Australia are set nationally as part of the Australian Design Rules.

Over time, new vehicles are getting safer. In fact, 84% of new vehicles sold in South Australia in 2016-18 had a 5-star rating, which was more than double the 2010 figure of 41%. Older vehicles are over-represented in crashes, with vehicles aged at least 15 years representing a quarter of the South Australian fleet but 37% of 2018 serious casualty crashes.[23]

RAA recommends exploring initiatives in the following areas to make South Australian vehicles safer:

C1. **Ways to encourage the purchase of new 5-star vehicles and thereby reduce the age and increase the safety of the vehicle fleet** – While new vehicles sold in South Australia now typically have a 5-star rating, new vehicle sales across Australia have been falling in recent years. The 2019 figure of 1,062,867 vehicle sales was the lowest annual sales result since 2011.[24] This has resulted in an ageing South Australian passenger vehicle fleet, with the average age of registered vehicles increasing from 10.5 years in 2011 to 12.3 years in 2018.[25] According to 2019 ABS Motor Vehicle Census data, the average South Australian passenger vehicle is 1.7 years older than the average Australian passenger vehicle, meaning that South Australia has the second oldest fleet in the nation after Tasmania.[26] The economic impact of COVID-19 is likely to lead to the fleet ageing further over the next year. Three quarters of the light vehicles involved in fatal crashes in 2019 had a safety rating of 3 stars or less or (being 15 or more years old) had no safety rating at all.[27] Measures that encourage consumers to replace older vehicles with newer, safer vehicles would substantially improve the safety of the South Australian vehicle fleet, although some measures might need to be delayed until the post-COVID-19 economic recovery begins. Measures might include greater promotion of ANCAP and UCSR at point of purchase, expanding the range of vehicles tested under ANCAP, replacing older vehicles within the government fleet, reducing upfront vehicle purchase costs

[23] Department of Planning, Transport and Infrastructure (2019), *South Australia's Road Safety Strategy Annual Progress Report 2018*, accessed at https://www.dpti.sa.gov.au/towardszerotogether/road_crash_facts

[24] Accessed at https://www.fcai.com.au/news/index/view/news/600

[25] Department of Planning, Transport and Infrastructure (2019), *South Australia's Road Safety Strategy Annual Progress Report 2018*, accessed at https://www.dpti.sa.gov.au/towardszerotogether/road_crash_facts

[26] ABS (2019), *Motor Vehicle Census, Australia, 31 Jan 2019*, accessed at https://www.abs.gov.au/ausstats/abs@.nsf/mf/9309.0

[27] Department of Planning, Transport and Infrastructure (2020), *2019 Road Fatalities and Serious Injuries In South Australia*, accessed at https://www.dpti.sa.gov.au/towardszerotogether/road_crash_facts

(e.g. through stamp duty reductions) or vehicle scrappage schemes providing a cash payment for trading in older cars.

C2. **Continuing to regularly review the Australian Design Rules to ensure vehicle safety standards reflect global best practice** – The South Australian Government is represented on a range of bodies consulted on the review and revision of the Australian Design Rules. The Australian Government seeks where possible to align national vehicle safety standards with international regulations such as those adopted by the United Nations Economic Commission for Europe (UNECE). The European Parliament last year passed legislation requiring new vehicles from 2022 to be fitted with a range of safety features including intelligent speed assist, alcohol interlock installation facilitation, event data recorders, advanced emergency braking systems and enlarged head impact protection zones.[28] It is important that vehicle safety standards in Australia keep pace with those in global leading countries for road safety if South Australia is to itself be a road safety leader.

[28] Accessed at https://www.consilium.europa.eu/en/press/press-releases/2019/03/29/eu-beefs-up-requirements-for-car-safety/

D. Safe People

A US study of the causes of motor vehicle crashes assigned the critical reason for the crash to a driver in 94% of cases (with 2% assigned to the vehicle, 2% to the environment and 2% unknown), where driver errors included errors in recognition, decision-making and performance.[29] A Safe System approach acknowledges that road crashes are often the result of human mistakes and poor choices and seeks to ensure that human error does not result in a fatality or serious injury. However, it also involves measures to reduce the number of human mistakes and poor choices, including creating a set of safe road rules, educating road users on these rules and enforcing compliance with these rules.

In Australia, much attention has been given to the 'Fatal Five' risky driving behaviours, and these remain a focus of both education and enforcement activities. Of the 266 South Australian road fatalities between 2016 and 2018, SAPOL attributed the following number to each of the Fatal Five:

- Drink and drug driving – 87 (43 drug, 31 alcohol, 13 both)
- Speeding – 38
- Seatbelts – 35
- Dangerous road users – 22
- Distraction (including mobile phone use) – 7.[30]

There are also specific road user groups who have an inflated risk of being involved in a serious casualty crash in South Australia:

- Males account for approximately three quarters of fatalities and two thirds of serious injuries
- 16-24 year olds account for 2 in 10 fatalities and serious injuries but are only 1 in 10 of the population, and 91% of 16-24 year old fatalities are responsible for the crash they are involved in; the crash rate is highest in the first 12 months after obtaining a provisional licence
- Those aged 70+ represented a quarter of 2019 fatalities but only 13% of the population, with fatality numbers for this group doubling from 2018; 70-79 year olds have the lowest rate of involvement in fatal and serious crashes of any age group (suggesting that their high fatality rate is due to frailty rather than dangerous driving), but this rate increases markedly for 80-89 year olds and again for those aged 90+
- Unlicensed drivers are involved in around 1 in 10 fatalities
- Pedestrians and cyclists are known to be more vulnerable road users due to the lack of a protective vehicle, although the exact risk levels are tricky to measure due to lack of reliable data on the amount of walking and cycling that takes place. The UK's National Travel Survey enables a comparative measure of risk by each transport mode, and shows that in Great Britain in 2018 pedestrians and cyclists had a fatality rate per billion miles travelled of nearly 20 times that of a car.[31]
- Motorcyclists represent 4% of registered vehicles but 18% of serious injuries and 13% of fatalities, with 10.8 motorcyclist fatalities for every 100 million kilometres travelled (VKT) compared with 0.4 fatalities per 100 million VKT for all other road users.[32]

[29] National Highway Traffic Safety Administration (2015), *Critical Reasons for Crashes Investigated in the National Motor Vehicle Crash Causation Survey*, accessed at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812115

[30] SAPOL (2019), *Road Safety Strategy 2019-2020*, accessed at https://www.police.sa.gov.au/your-safety/road-safety

[31] Department for Transport (2019), *Reported road casualties in Great Britain: 2018 annual report*, accessed at https://www.gov.uk/government/statistics/reported-road-casualties-in-great-britain-annual-report-2018

[32] Department of Planning, Transport and Infrastructure (2020), *2019 Road Fatalities and Serious Injuries In South Australia*, accessed at https://www.dpti.sa.gov.au/towardszerotogether/road_crash_facts

Efforts to make road users safer need to reflect where risk is highest, but should avoid making it more difficult for a population group to travel. For example, a blanket prevention of older people from driving would unfairly discriminate against many safe drivers, reduce independence and access to many important services and amenities, and potentially simply shift fatality numbers for this group from driving to other modes of transport. Measures also need to reflect the source of the risk as well as the victim of it.

Revenue from speed safety cameras goes into a Community Road Safety Fund, which funds a range of education, engineering and enforcement road safety initiatives, but there is currently a lack of transparency as to what initiatives get funded.

RAA recommends exploring initiatives in the following areas to make South Australian road users safer:

D1. **Increased and broadened road safety offerings for schools** – Land transport accidents are the leading underlying cause of death for children aged 1-14 and the second leading underlying cause for 15-24 year olds.[33] In a 2020 RAA survey of 3,501 Year 10-12 students, only 3 in 10 agreed that they had been taught a lot about road safety at school. As part of its Street Smart program, RAA delivers road safety lessons at primary schools across South Australia with a focus on pedestrian, passenger and wheeled safety and runs an annual road safety event for Year 10-12 students with a particular focus on safe driving.[34] However, RAA programs only reach a proportion of schools and children in South Australia, and school students will only typically receive education through this program on an annual basis at most. Road safety curriculum content needs to be provided on a regular basis over a child's school career to reinforce existing concepts and introduce new skills as children develop.[35]

D2. **Greater use of professional driving instruction by learner drivers** – Learner drivers need to be accompanied by a qualified supervising driver as they build up their driving experience, but they can choose to what extent this supervision comes from a professional driving instructor or from a friend or family member. Professional driving instructors are best placed to teach learners how to drive safely as they have both experience and ongoing training in teaching others to drive. In recognition of this, New South Wales offers a Safer Drivers Course that earns a bonus 20 hours log book credit and both New South Wales and Queensland apply a 3-for-1 bonus to up to 10 hours of structured lessons with a licensed driving instructor.[36] Similar schemes could help promote greater use of professional driving instruction in South Australia.

D3. **Greater help for disadvantaged learner drivers to obtain their supervised hours** – Learner drivers in South Australia are required to undertake a minimum of 75 hours of supervised driving before they are eligible to obtain their provisional licence. For many, completing these hours does not generally present a problem; however, for some disadvantaged learner drivers, gaining access to a qualified driver or a vehicle to practise in can prove to be a significant barrier. There are various programs that provide underprivileged learner drivers with access to a volunteer to supervise them and a vehicle to practise in, including Wheels in Motion and Geared2Drive in South Australia and RAA's License to Work program, which it runs in collaboration with a number of South Australian senior schools.

[33] Accessed at https://www.aihw.gov.au/reports/life-expectancy-death/deaths-in-australia/contents/leading-causes-of-death

[34] Accessed at https://www.raa.com.au/about-raa/community-programs/community-education

[35] VicRoads and the Transport Accident Commission, *Effective Community & School Based Road Safety for Young People*, accessed at http://www.roadsafetyeducation.vic.gov.au/research-and-statistics

[36] Accessed at https://www.rms.nsw.gov.au/roads/licence/driver/learner/safer-drivers-course.html and https://www.qld.gov.au/transport/licensing/getting/schools

In Victoria, the Transport Accident Commission provides funding to approximately 60 individual mentor program operators under the L2P overarching banner. VicRoads claims that the program reduces the extent of unlicensed and less experienced driving and hence reduces the costs associated with these drivers being involved in a crash by $8.34 million per annum.[37] If South Australia were to adopt the L2P funding model then similar benefits could be achieved through expanding programs in South Australia to assist more learner drivers.

D4. **A more comprehensive graduated licensing scheme for motorcyclists in line with requirements for drivers and reduced upfront licence costs** – The graduated licensing scheme was first introduced for South Australian learner car drivers in 1989, and has been progressively expanded over time to increase the amount of driver education required and to more gradually lift driving restrictions. While novice drivers remain a high-risk group, their fatality and serious injury numbers have dropped dramatically over the past 30 years. Motorcycle riders also have a graduated licensing scheme, but it is less comprehensive than for car drivers, despite their risk of injury and death being much higher. DPTI ran a public consultation in 2018 seeking feedback on a more comprehensive motorcycle graduated licensing scheme, including increasing the minimum learner age and phase length, requiring the display of distinctive plates, night time curfews and zero blood alcohol requirements, mandating a motorcycle licence for moped use, and the introduction of hazard perception and on-road testing.[38] The RAA supports the expansion of the motorcycle graduated licensing scheme in line with the recommendations made by the Motorcycle Riders' Association of South Australia.[39] Alongside this, we advocate for a reduction in the cost of obtaining a motorcycle licence as part of measures to reduce levels of unlicensed riding.

D5. **Continued support for targeted Think! Road Safety community education campaigns** – It is important that the South Australian Government continues to invest in community road safety education campaigns, particularly to facilitate the introduction of new legislation or enforcement measures, or where there is a need to gain community support for a measure before it is introduced (e.g. explaining the road safety benefits of lower speed limits).[40] Where campaigns seek to influence attitudes, they should be targeted at the population groups whose attitudes least align with road safety principles. For instance, males account for approximately three quarters of road fatalities and therefore campaigns aimed at males have greater potential gains than campaigns aimed at females. Campaigns should also address the underlying reasons why people disobey the road rules and build their competency to act in safe ways in situations where they have the opportunity to do otherwise.

[37] Frontier Economics (2013), *Evaluation of the L2P learner driver mentor program*

[38] Department of Planning, Transport and Infrastructure (2019), *Protecting South Australia's Novice Motorcyclists*: *Outcomes from Public Consultation*, accessed at https://towardszerotogether.sa.gov.au/safe_road_users/motorcyclists/protecting_south_australias_novice_motorcyclists_outcomes_from_public_consultation

[39] Accessed at http://www.mrasa.asn.au/Inc_GLSchanges.shtml

[40] Motor Accident Commission (2015), *Guidance for Effective Campaigns*, accessed at https://www.aph.gov.au/DocumentStore.ashx?id=6da7e502-ef0d-4cd1-ac08-408a9b9aeaea